

Remarks

Claims 86-90 and 94-95 are pending in the Application.

Claims 86-88, 90, and 94-95 stand rejected.

Claim 89 is allowed.

Claims 86 and 87 are amended herein.

I. EXAMINER INTERVIEW

On January 27, 2005, the undersigned counsel for Applicant and Dr. Ken Smith, a co-inventor of the Application, met with the Examiner to discuss the Application and the Final Office Action. Applicant and its counsel appreciate the opportunity to have this discussion and wish to thank the Examiner for the interview.

II. REJECTIONS UNDER 35 U.S.C. § 102/§ 103

Examiner has rejected Claims 86-88, 90, and 94-95 under 35 U.S.C. § 102(a) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over, Kiang *et al.*, "Carbon Nanotubes with Single-Layer Walls," Carbon, 33(7), pp. 903-914, 1995 ("*Kiang*"). Final Office Action at 4-5.

As reflected in the Examiner Interview Summary, the Examiner has withdrawn the position that "it is expected that the bundled single-walled nanotubes of Kiang *et al.* have a substantially uniform diameter." Interview Summary, at 1; Final Office Action, at 5.

The Examiner indicated that to differentiate from *Kiang* and the other prior art of record, Applicant should clarify the meaning of the term "composite" as applied to the claims. Interview Summary, at 1. As discussed in the specification of the Application, there are single-wall carbon nanotubes and fibers of single-wall carbon nanotubes that are similar (*see, e.g.*, Application, at 46, *ll.* 10-11) and those that are not. For example, metallic single-wall carbon nanotubes are different from non-metallic single wall nanotubes; furthermore, fibers made of metallic single-wall carbon nanotubes are different from fibers made of non-

metallic single-wall carbon nanotubes. *See* Application, at 46, *ll.* 17-20. A “composite” is a substance that comprises at least two types of materials (*i.e.*, in the case of the claimed invention of the present Application, (a) a first plurality of single-wall carbon nanotubes and a second plurality of single-wall carbon nanotubes, which are different and (b) a first plurality of continuous carbon fibers and a second plurality of continuous carbon fibers, which are different).

To further clarify this element is in the claims of the present Application, Applicant has amended independent Claims 86 and 87 to affirmatively recite these limitations.

In Claim 86, Applicant has affirmatively recited that “the first plurality of single-wall carbon nanotubes is different from the second plurality of single-wall carbon nanotubes.” The claims further make clear that this difference includes a difference of at least one homogenous characteristic.

In Claim 87, Applicant has affirmatively recited that there are two pluralities of continuous carbon fibers in the claimed composite fiber. For the first plurality of continuous carbon fibers, each “comprises single-wall carbon nanotubes in substantially parallel orientation and is similar to the other continuous carbon fibers in the first plurality of continuous carbon fibers.” Similarly for the second plurality of continuous carbon fibers, each “comprises single-wall carbon nanotubes in substantially parallel orientation and is similar to the other continuous carbon fibers in the second plurality of continuous carbon fibers.” Applicant has further included the limitation that “the continuous carbon fibers of the first plurality of continuous carbon fibers are different from the continuous carbon fibers of the second plurality of carbon fibers.”

Such elements of Claims 86 and 87 reflect the composite structure being claimed. As the *Kiang* does not show such composite structure, Claims 86 and 87 are neither anticipated by nor obvious in view of *Kiang*.

Regarding the remainder of the rejected claims, Claims 94-85 depend directly from Claim 86, and Claims 88 and 90 depend directly from Claim 87. Thus, these dependent claims are not anticipated for the same reasons as for Claims 86 and 87.

As a result of the foregoing, Applicant respectfully requests that the Examiner withdraw rejection of Claims 86-88, 90, and 94-95 under 35 U.S.C. § 102(a) as being anticipated by *Kiang* by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over *Kiang*.

III. ALLOWED CLAIM

Examiner has allowed Claim 89. Final Office Action, at 5.

IV. CONCLUSION

As a result of the foregoing, it is asserted by Applicant that the Claims in the Application are now in a condition for allowance, and respectfully request allowance of such Claims.

Applicant respectfully requests that the Examiner call Applicant's attorney at the below listed number if the Examiner believes that such a discussion would be helpful in resolving any remaining problems.

Respectfully submitted,

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